



DOCKET NO.: C0989.70054US00

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Gilmanshin et al.

Serial No.:

10/622,076

Confirmation No.:

1842

Filed:

July 17, 2003

For:

METHODS AND COMPOSITIONS FOR ANALYZING POLYMERS USING

**CHIMERIC TAGS** 

Examiner:

Angela Marie Bertagna

Art Unit:

1637

#### **CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)**

Emily E. Zylkauskas

#### MAIL STOP AMENDMENT

Commissioner For Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Transmitted herewith are the following documents:

- Information Disclosure Statement
- PTO Form 1449 with cited references
- Return Receipt Postcard

If the enclosed papers are considered incomplete, the Mail Room and/or the Application Branch is respectfully requested to contact the undersigned at (617) 646-8000, Boston, Massachusetts.

A check is not enclosed. If a fee is required, the Commissioner is hereby authorized to charge Deposit Account No. 23/2825. A duplicate of this sheet is enclosed.

Respectfully submitted,

By:

Maria A. Trevisan, Reg. No.: 48,207 Wolf, Greenfield & Sacks, P.C.

600 Atlantic Avenue

Boston, Massachusetts 02210-2206

Telephone: (617) 646-8000

Docket No.: C0989.70054US00 Date: December 16 2005

xNDDx



DOCKET NO.: C0989.70054US00

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Gilmanshin et al.

Serial No.:

10/622,076

Confirmation No.:

1842

Filed:

July 17, 2003

For:

METHODS AND COMPOSITIONS FOR ANALYZING

POLYMERS USING CHIMERIC TAGS

Examiner:

Angela Marie Bertagna

Art Unit:

1637

#### **CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)**

The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to MAIL STOP AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the homeometric day of December, 2005.

Emily E. Zukauskas

## MAIL STOP AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

# STATEMENT FILED PURSUANT TO THE DUTY OF DISCLOSURE UNDER 37 CFR §§1.56, 1.97 AND 1.98

Sir:

Pursuant to the duty of disclosure under 37 C.F.R. §§1.56, 1.97 and 1.98, the Applicant requests consideration of this Information Disclosure Statement.

## PART I: Compliance with 37 C.F.R. §1.97

This Information Disclosure Statement has been filed before the mailing of a first Office action on the merits in the above-identified case.

No fee or certification is required.

Serial No.: 10/622,076 - 2 - Art Unit: 1637

Conf. No.: 1842

#### **PART II: Information Cited**

The Applicant hereby makes of record in the above-identified application the information listed on the attached form PTO-1449 (modified PTO/SB/08). The order of presentation of the references should not be construed as an indication of the importance of the references.

The Applicant hereby makes the following additional information of record in the above-identified application.

The Applicant would like to bring to the Examiner's attention the following co-pending applications that may contain subject matter related to this application:

Serial No.	Filing Date	Inventor(s)	Docket No.
10/974,002	10-25-2004	Larson	*C0989.70059US01
11/180,980	07-13-2005	Lee et al.	*C0989.70074US01
11/210,111	08-23-2005	Randall et al.	*C0989.70067US01
11/210,155	08-23-2005	Fuchs et al.	*C0989.70039US01
11/250,179	10-13-2005	Larson et al.	*C0989.70076US01
11/253,051	10-18-2005	Nilsen et al.	*C0989.70077US01
11/286,714	11-23-2005	Nadel et al.	C0989.70072US01

<sup>\*</sup>A copy of this reference is not provided as the Office has waived the requirement under 37 C.F.R. 1.98(a)(2)(iii) for submitting a copy of a cited U.S. patent application if it is scanned to the Image File Wrapper system and is available on Private PAIR.

## PART III: Remarks

Documents cited anywhere in the Information Disclosure Statement are enclosed unless otherwise indicated. It is respectfully requested that:

- 1. The Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims;
- 2. The enclosed form PTO-1449 (modified PTO/SB/08) be signed by the Examiner to evidence that the cited information has been fully considered by the Patent and Trademark Office during the examination of this application;

Serial No.: 10/622,076 - 3 - Art Unit: 1637

Conf. No.: 1842

3. The citations for the information be printed on any patent which issues from this application.

By submitting this Information Disclosure Statement, the Applicant makes no representation that a search has been performed, of the extent of any search performed, or that more relevant information does not exist.

By submitting this Information Disclosure Statement, the Applicant makes no representation that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b).

By submitting this Information Disclosure Statement, the Applicant makes no representation that the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. §102.

Notwithstanding any statements by the Applicant, the Examiner is urged to form his or her own conclusion regarding the relevance of the cited information.

An early and favorable action is hereby requested.

Respectfully submitted,

By: MMusah

Maria A. Trevisan, Reg. No. 48,207 Wolf, Greenfield & Sacks, P.C.

woll, Greenfield & Sacks,

600 Atlantic Avenue

Boston, Massachusetts 02210-2206

Telephone: (617) 646-8000

Docket No.: C0989.70054US00

Date: December 16, 2005

**xNDDx** 

	18072					
FORNERTO	2 1 7/105 No. 1449/A and 25/m	odified	PT()/\$R/08)	APPLICATION NO.:	10/622,076	ATTY. DOCKET NO.: C0989.70054US00
	KWATTON D			FILING DATE:	July 17, 2003	CONFIRMATION NO.: 1842
	EMENT BY			APPLICANT:	Gilmanshin et al.	
				GROUP ART UNIT:	1637	EXAMINER: Angela Marie Bertagna
Sheet	1	of	3	GROOF ART ONT.	1057	EAAWIINEK. Aligeia Walle Dellaglia

**U.S. PATENT DOCUMENTS** 

Examiner's Cit	Cite	U.S. Patent Do	cument	Name of Patentee or Applicant of Cited	Date of Publication or Issue	
22	No.	Number Kind Code		Document	of Cited Document MM-DD-YYYY	
	A2	4,737,454		Dattagupta et al.	04-12-1988	
	A3	4,873,187		Taub et al.	10-10-1989	
	A4	4,959,309		Dattagupta et al.	09-25-1990	
	A5	5,525,465		Haralambidis et al.	06-11-1996	
	A6	5,629,178		Demers	05-13-1997	
	A7	5,955,590		Levina et al.	09-21-1999	
	A8	6,110,676		Coull et al.	08-29-2000	
	A9	6,165,720		Felgner et al.	12-26-2000	
	A10	6,197,513	Bl	Coull et al.	03-06-2001	
	A11	6,210,896	Bl	Chan	04-03-2001	
	A12	6,225,063	B1	Khvorova et al.	05-01-2001	
	A13	6,263,286	Bl	Gilmanshin et al.	06-17-2001	
	A14	6,280,946	B2	Hyldig-Nielsen et al.	08-28-2001	
		6,287,772	B1	Stefano et al.	09-11-2001	
	A16	6,312,894	B1	Hedgpeth et al.	11-06-2001	
	A17 6,403,311 B1		Bl	Chan	06-11-2002	
	A18	6,696,022	Bl	Chan et al.	02-24-2004	
	A19	6,762,059	B2	Chan et al.	07-13-2004	
<u>.</u>	A20	6,772,070	B2	Gilmanshin et al.	08-16-2004	
	A21	6,790,671	Bl	Austin et al.	09-14-2004	
	A22	6,927,065		Chan et al.	08-09-2005	
	A23	2002-0110818	Al	Chan	08-15-2002	
	A24	2002-0119455	A1 .	Chan	08-29-2002	
	A25	2002-0187508	A1	Wong	12-12-2002	
	A26	2002-0197639	A1	Shia et al.	12-26-2002	
	A27	2003-0059822	Al	Chan et al.	03-27-2003	
	A28	2003-0215864	A1	Gilmanshin et al.	11-20-2003	
	A29	2003-0235854	A1	Chan	12-25-2003	
	A30	2004-0009612	A1	Zhao et al.	01-15-2004	
	A31	2004-0166025	Al	Chan et al.	08-26-2004	
×	A32	2004-0214211	Al	Gilmanshin et al.	10-28-2004	
	A33	2004-0235014	Al	Nadel et al.	11-25-2004	

EXAMINER:	DATE CONSIDERED:	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or notitation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FODM DTO	1//0//	d D (modific	4 DT(\CD/\\0)	APPLIC	ATION NO.: 10/622,076	ATTY. DO	CKET NO.: C0989.7	0054US00
FORM PTO-1449/A and B (modified PTO/SB/08)  INFORMATION DISCLOSURE			FILING	FILING DATE: July 17, 2003 CONFIRMATION NO.: 1842				
			LUSURE	APPLIC	ANT: Gilmanshin	et al.		
Sheet		of	3	GROUP	ART UNIT: 1637	EXAMINE	R: Angela Marie B	ertagna
			<u> </u>		<u></u>	<u>_</u>		
	A34	2005-004	2665	A1	Gilmanshin		02-24-2005	
	A35	2005-011	2595	A1	Zhao et al.		05-26-2005	
	A36	2005-011	2606	Al	Fuchs et al.		05-26-2005	
	A37	2005-011	2620	Al	Chan		05-26-2005	.**
	A38	2005-011	2671	Al	Maletta et al		05-26-2005	
	A39	2005-012	3944	A1	Neely et al.		06-09-2005	
	A40	2005-012	3974	Al	Gilmanshin et al.		06-09-2005	
	A41	2005-014	2595	Al	Maletta et al.		06-30-2005	
	A42	2005-015	3354	A1	Gilmanshin et al.		07-04-2005	
	A43	2005-019	6790	A1	Rooke et al.		09-08-2005	
	A44	2005-022	1408	Al	Nalefski et al.		10-06-2005	
		<u></u>						
				FOREI	GN PATENT DOCUMENT	rs		
		For	eign Patent Docu	ment	N. SP-44	A multiplier of Cited	Date of	Translation
Examiner's Initials #	Cite No.	Office/ Country	Number	Kind Code	Document Cite		Publication of Cited Document MM-DD-YYYY	(Y/N)
	B1	WO	98/35012	A2	U.S. Genomics, Inc.		08-13-1998	
	B2	WO	00/09757	A1	U.S. Genomics, Inc.		02-24-2000	
	B3	WO	01/13088	Al	U.S. Genomics, Inc.	·	02-22-2001	
				A S	Ab.			
						<del></del>		
				1	<u></u>			
Examiner's Initials #	Cite No	Include (book, m	name of the author	or (in CAPIT serial, symp	AL LETTERS), title of the a osium, catalog, etc.), date, particles	article (when appropria age(s), volume-issue n	ite), title of the item umber(s), publisher,	Translation (Y/N)
	C1	ALAHARI et al., Inhibition of expression of the multidrug resistance-associated P-glycoprotein of by phosphorothioate and 5' cholesterol-conjugated phosphorothioate antisense oligonucleotides. Mol						
	C2	Pharmacol. 1996 Oct;50(4):808-19. Abstract Only.  BRAASCH et al., Locked nucleic acid (LNA): fine-tuning the recognition of DNA and RNA. Chem Biol. 2001 Jan;8(1):1-7. Abstract Only.						
	C3	BUNNELL et al., Targeted delivery of antisense oligonucleotides by molecular conjugates. Somat Cell Mol Genet. 1992 Nov;18(6):559-69. Abstract Only.						
	C4	GRIGORIEV et al., Inhibition of gene expression by triple helix-directed DNA cross-linking at specific sites. Proc Natl Acad Sci U S A. 1993 Apr 15;90(8):3501-5.						
	C5		•		efficient route to 2'-O, 4'-0d). J Org Chem. 2001 Dec	•	-	
EXAMINER:			<del>,, , , , , , , , , , , , , , , , , , ,</del>		DATE CONSI	DERED:		

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or notitation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449/A and B (modified PTO/SB/08	APPLICATION NO.:	10/622,076	ATTY. DOCKET NO.: C0989.70054US00		
	FILING DATE:	July 17, 2003	CONFIRMATION NO.: 1842		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Gilmanshin et al.			
Sheet 3 of 3	GROUP ART UNIT:	1637	EXAMINER: Angela Marie Bertagna		
Sheet 3 of 3					
_	ed delivery of plasmid DNA		• •		
	Mol Ther. 2000 Mar; 1(3):2		rties of the homogenous		

C6	LIANG et al., Targeted delivery of plasmid DNA to myogenic cells via transferrin-conjugated peptide nucleic acid. Mol Ther. 2000 Mar;1(3):236-43. Abstract Only.	
C7	MODRICH et al., EcoRI endonuclease. Physical and catalytic properties of the homogenous enzyme. J Biol Chem. 1976 Oct 10;251(19):5866-74.	
C8	NORTON et al., Targeting peptide nucleic acid-protein conjugates to structural features within duplex DNA. Bioorg Med Chem. 1995 Apr;3(4):437-45. Abstract Only.	
C9	ORUM et al., Locked nucleic acids: a promising molecular family for gene-function analysis and antisense drug development. Curr Opin Mol Ther. 2001 Jun;3(3):239-43. Abstract Only.	
C10	PARDRIDGE et al., Vector-mediated delivery of a polyamide ("peptide") nucleic acid analogue through the blood-brain barrier in vivo. Proc Natl Acad Sci U S A. 1995 Jun 6;92(12):5592-6.	
C11	PETERSEN et al., The conformations of locked nucleic acids (LNA). J Mol Recognit. 2000 Jan- Feb;13(1):44-53. Abstract Only.	
C12	RAJUR et al., Covalent protein-oligonucleotide conjugates for efficient delivery of antisense molecules. Bioconjug Chem. 1997 Nov-Dec;8(6):935-40. Abstract Only.	
C13	SAM et al., Catalytic roles of divalent metal ions in phosphoryl transfer by EcoRV endonuclease.  Biochemistry. 1999 May 18;38(20):6576-86. Abstract Only.	
C14	TAYLOR et al., Probing specific sequences on single DNA molecules with bioconjugated fluorescent nanoparticles. Anal Chem. 2000 May 1;72(9):1979-86.	
C15	WAGNER et al., Transferrin-polycation conjugates as carriers for DNA uptake into cells. Proc Natl Acad Sci U S A. 1990 May;87(9):3410-4.	
C16	ZENKE et al., Receptor-mediated endocytosis of transferrin-polycation conjugates: an efficient way to introduce DNA into hematopoietic cells. Proc Natl Acad Sci U S A. 1990 May;87(10):3655-9.	

<sup>\*</sup>a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, Serial No. \_\_\_, filed \_\_\_, and relied upon for an earlier filing date under 35 U.S.C. 120 (continuation, continuation-in-part, and divisional applications).

[NOTE – No copies of U.S. patents, published U.S. patent applications, or pending, unpublished patent applications stored in the USPTO's Image File Wrapper (IFW) system, are included. See 37 CFR §1.98 and 1287OG163. Copies of all other patent(s), publication(s), unpublished, pending U.S. patent applications, or other information listed are provided as required by 37 CFR §1.98 unless 1) such copies were provided in an IDS in an earlier application that complies with 37 CFR §1.98, and 2) the earlier application is relied upon for an earlier filing date under 35 U.S.C. §120.]

EXAMINER:	DATE CONSIDERED:	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or notitation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.